

Lamprey River Management Plan for the towns of Durham, Epping, Lee, and Newmarket

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Members of the LRAC are residents of Durham, Lee, Epping, and Newmarket. The LRAC is a permanent citizens' committee created through the NH Rivers Management and Protection Program for the State-protected segment of the Lamprey River in Lee and Durham. Lee and Durham each have five members who are appointed for three-year terms. Representatives from Newmarket and Epping are serving as volunteers for a federal Wild and Scenic study of the Lamprey River in the four towns.

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I. Introduction

Purpose This Management Plan was developed to create a framework for successful long-term use and protection of the Lamprey River -- a complex natural resource. It attempts to define a future for the river which respects the legitimate interests of property owners while recognizing that the river is an important community resource with fish and wildlife habitats of statewide significance. The content of this Plan is based upon public input, technical research, practical realities, and the best judgment of the Lamprey River Advisory Committee (LRAC) who prepared it.

Organization This Plan addresses five aspects of the river's ecology and use: water quality, instream flow, ecological integrity, historical and archaeological resources, and public enjoyment. Each discussion includes background information, goals, a definition of the issues, and recommended actions. The order in which actions are listed is not meant to imply any order of importance, since this is a long-term plan, and priorities will shift depending on the perceived immediacy of the need, the availability of funding to address particular problems, and communty interest. The Plan also addresses the impact of potential national Wild and Scenic designation.

Additional background information is contained in the Resource Assessment, a companion document to this Plan. The LRAC also relied on findings from its riverfront landowners' survey and documents prepared by field researchers hired by The Nature Conservancy under the auspices of the National Park Service/NH Department of Environmental Services/LRAC to inventory selected natural assets in the river corridor.

Background During the past 15 years, the Lamprey River has increasingly drawn the attention of local, state, and even federal groups who have come to recognize its value. In 1979, the Strafford Regional Planning Commission mapped the entire river and discovered an impressive number of significant resources: historical and archaeological sites, recreational opportunities, great stretches of scenic, undisturbed river, and a fisheries resource of considerable value. (The NH Fish & Game Commission cited the Lamprey as the State's most significant river for all anadromous fish.) The Lamprey River Watershed Association (LRWA) was founded as a result of that study, to carry out cooperative intertown advocacy for the river.

During this same period, the National Park Service was compiling an inventory of rivers across the country believed to qualify for Wild and Scenic designation. The Park Service awarded the Lamprey a place on this inventory in 1982.

In 1988, New Hampshire enacted the State Rivers Management and Protection Program (RMPP) to protect its most important rivers, including the Lamprey by name. In 1990 the LRWA and citizens of Lee and Durham petitioned the State to include in the state program the segment of the Lamprey flowing through those two towns. The state legislature approved designation of the Lamprey as a rural river in the RMPP. The RMPP calls for the development of a management plan. This document serves

that requirement.

The granting of a license for development of a hydroelectric plant at Durham's Wiswall Dam brought the need for better protection of the river to the forefront. While State and local authorities have some jurisdiction over the watercourse, both can be overruled by certain federal agencies, such as the Federal Energy Regulatory Commission (FERC) and the Army Corps of Engineers. Only the Wild and Scenic Rivers Program affords towns protection from federal actions potentially damaging to the river, including the licensing of hydroelectric facilities. For this reason the towns of Lee and Durham to request that Congress enact a Wild and Scenic study for the Lamprey, which it did in 1991. The study resulted in a stay of FERC licensing activities on the study segment of the Lamprey pending outcome of the study.

The Wild and Scenic study includes two components: an inventory of the river's various resources and attributes and a locally developed plan for addressing present and future challenges and opportunities on the river. This Plan and the supplementary Resource Assessment fulfill those requirements.

The Plan's success depends on the willingness of local, state, and federal parties to work cooperatively. The Resource Assessment documents the river's natural and cultural attributes. This Management Plan is the Lamprey River Advisory Committee's attempt to develop strategies for protecting and optimizing the river's resources.

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II. Statement of Management Philosophy

The philosophy behind this Management Plan is based on two realizations: first, that the Lamprey will be facing increasing pressure from development and recreational use as population grows; and, second, that management of the river must strike a balance among desires to protect the river as an ecosystem, maintain the river for legitimate community use, and protect the interests and property rights of those who own its shorelands.

In making the recommendations in this Plan, we are looking to the future while attempting to resolve problems of the present. It is our firm belief that individual actions are the key to river protection. This belief has been distilled into our unifying theme, "TREAD LIGHTLY."

The theme relates to many aspects of river management. We hope that by "treading lightly" and leaving little evidence of their presence, people will create a future for the river that is dominated by appropriate recreational activities, a natural appearance, clean water, an abundance of fish and wildlife species, and protected historical and archaeological sites. We believe that the Lamprey can be simultaneously protected and utilized if landowners, town boards, recreationists, and the state and federal governments are well informed about its unique attributes and work to safeguard them.

Notwithstanding the protection afforded by the NH Rivers Program, state and federal regulatory programs, and the federal Wild and Scenic Rivers Program (presently under study), the Lamprey's future as a community asset rests most squarely on the willingness of individuals and the towns along it to act responsibly towards the river.

TREAD LIGHTLY is a philosophy of human interaction with the river in which our behavior is guided by ecological awareness and the desire to minimize our impact on the environment.

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III. Overview of Key Management Plan Elements

This section summarizes the principal components and recommendations of the Lamprey River Management Plan.

<u>Wild and Scenic River Designation</u> The LRAC unanimously recommends designation of the Lamprey River as a component of the national Wild and Scenic Rivers System. Designation would accomplish the following:

- 1) protect the critical interests of the Town of Durham at the Wiswall Dam by preventing the conveyance of the dam and its water rights from the Town to a private hydroelectric developer;
- 2) protect the interests of riverfront landowners and the aspects of the river's ecology that could be jeopardized by hydroelectric development;
- 3) require all federal agencies to respect both existing state policies and local priorities, as outlined in this Management Plan;
- 4) establish a permanent partnership with the National Park Service to assist local communities and the Committee in implementing this Plan and in meeting the future needs of the river;
- 5) increase the likelihood of federal funding for desired projects, as well as increase the ability to compete for non-governmental grants for those projects.

<u>"TREAD LIGHTLY"</u> Throughout this Plan the LRAC has promoted an approach to river protection that emphasizes the importance of individual actions. Each of us who visits, lives by, or uses the Lamprey can minimize human impacts on the river and its corridor while continuing to enjoy them by acting thoughtfully and responsibly.

<u>Water Quality</u> Its relatively small size, low elevation, shallow depths, and extremely low summer flows combine to make the Lamprey particularly susceptible to water pollution threats.

The LRAC believes that the State/EPA coastal watershed initiative to control polluted runoff offers an important tool for protecting the Lamprey. The LRAC will work to secure the support of landowners, towns and the State for implementing this program effectively. The river's special protected status under both existing state and recommended federal river protection programs should help to leverage funding and focus attention on program implementation.

Water Conservation Growing awareness of the long-term potential for water shortages in this state and of the severe impact that low flows cause to water quality

and river ecosystems has generated new public policy discussions of water allocation and conservation. The LRAC will work with towns, the University of New Hampshire, and other large water users to make water conservation a priority in their planning processes. Support will come from the NHDES instream flow rules under the RMPP. When enacted, the rules will likely provide for notification to the general public and water users for voluntary water conservation when low flows occur and will require reductions in water use during critical low flow periods.

Floodplains, River Wetlands, and Sensitive Habitats Several sections of this Plan discuss the importance of the wetlands and floodplains along the river for improved water quality, flood control, wildlife habitat, and scenic beauty. The LRAC will promote protection of these and other ecologically sensitive areas through landowner education and through review and comment on relevant permit applications before town and state boards.

Voluntary Land Protection Many landowners along the Lamprey are unaware of the extent to which they hold the key to protection of the river's beauty and health. The LRAC will encourage riverfront landowners to maintain their shorelands, floodplains, wildlife habitats, and river-related wetlands in a natural condition, or to manage them sensitively. In 1993, the LRAC initiated a voluntary land protection program, in cooperation with the Society for the Protection of NH Forests, the National Park Service, the Lamprey River Watershed Association, and local conservation commissions to assist landowners interested in permanently protecting land through conservation easements.

Anadromous Fish Restoration The Lamprey is recognized as NH's most important anadromous fisheries resource. A fish passage facility at the Wiswall Dam would provide access to many miles of the river and several tributaries for migrating fish, thereby creating new habitat, improving the food chain, and establishing a new recreational fishery. If Wild and Scenic designation occurs, the LRAC will work with the Town of Durham and the National Park Service to plan and develop a fish ladder at Wiswall Dam. Wild and Scenic designation would support fish passage at this site without requiring funds from the Town.

Ecological Research and Monitoring Under the Wild and Scenic study, the National Park Service has funded two years of field research which has contributed significantly to knowledge about the river's wildife, aquatic ecology, and shoreland plant communities, from Epping to Newmarket. Additional inventory work needs to be done to build upon existing knowledge of the river system and to monitor changes in habitat. The LRAC will seek funding through both the Wild and Scenic Program (if the river is designated) and private organizations.

Enforcement of Existing Regulations Important regulations to protect the Lamprey exist at local, state, and federal levels. Well-informed and timely enforcement of these regulations is critical for protecting water quality, floodplains, wetlands, and scenic quality of the river. The LRAC will exercise its advisory responsibilities under the NH Rivers Management and Protection Program to review and comment on local, state, and federal proceedings as a means of encouraging sensible enforcement.

Historical and Archaeological Awareness The Lamprey has a rich history preserved in structures, in documents, and in historical and precolonial archaeological remains. It is important that this history be respected and important sites protected. The LRAC will seek funding to develop and publish a comprehensive history of the river, and will promote professional research on and protection of specific sites. The LRAC will draw upon the expertise and resources of local and state historians and archaeologists and the National Park Service to further these purposes.

Recreation Management Recreational use of the Lamprey has been generally self-limiting due to the relatively few access points, limited facilities, and low summer flows. To date, the low numbers of recreationists have made it unnecessary to manage use. However, site-specific problems do exist, and an overall recreation plan needs to be developed. The LRAC intends to address recreation-related problems by working with landowners, town officials, and other appropriate parties.

<u>Public and Landowner Education</u> The "TREAD LIGHTLY" philosophy proposed by the LRAC requires on-going community education. The LRAC in cooperation with local, regional, state, and federal agencies and organizations will develop educational materials and programs to promote the management philosophy embodied in this Plan.

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IV. Management and Protection of Water Resources

A. Water Quality

Background Landowners along the Lamprey responding to the LRAC's landowners' survey identified water quality as the single most important attribute to protect on the river. Because of its clean water, the river now supports a healthy diversity of aquatic life, provides pubic drinking water (after treatment), and supports swimming, fishing, boating, and other water-based recreation.

The Lamprey is legislatively classified as a Class B (swimmable, fishable) river, and is thus managed by the State under the federal Clean Water Act to maintain "fishable and swimmable" conditions. Water quality in the LRAC study area is generally high. During the summer, however, because it is warm, slow moving, characterized by low flows, and has several ponded areas, the river is vulnerable to pollution. Water quality occasionally suffers from excessive algae growth from nutrients entering the water, and dissolved oxygen and bacteria levels occasionally fall short of standards for a Class B river. During periods of extreme low flow, copper and zinc concentrations also occasionally have reached levels considered harmful to aquatic life. (For a summary of water quality data see the Resource Assessment and *Lamprey*

River Water Quality
Report for the
Nonpoint Source
Program, 1994
of Environmental Services.)

, prepared by the NH Department

Pollution problems are categorized in general terms as either originating from "point" sources or "nonpoint" sources. Point sources are discharges from pipes, such as pipes leading from sewage treatment plants, industrial plants, and stormwater culverts. A nonpoint source is any site from which polluted runoff can occur, such as a construction site, a pasture, or a heavily fertilized lawn. Difficult to locate and correct, nonpoint pollution currently is recognized as the greatest problem in maintaining high water quality nationally and locally.

The NH Department of Environmental Services (NHDES) maintains a limited water quality monitoring program at sampling sites along the river and its tributaries. Samples are taken once every three years during the summer, providing a snapshot in time of the river's water quality. The State does not currently conduct continuous water quality monitoring, which would detect changes in water quality during nonsampling years.

Additional studies are undertaken periodically. Examples include studies of particular sites or special projects, such as the above-referenced NHDES nonpoint source study.

Within the next two years, the NHDES and Office of State Planning must submit to Congress a strategy for implementing Best Management Practices (BMPs) to control

nonpoint source pollution in coastal waters, including the Lamprey. The strategies devised under the program (mandated in the Coastal Zone Act Reauthorization Amendments of 1990, Section 6217, "Protecting Coastal Waters") will be available for public review by the end of 1996. (See Appendix G on Best Management Practices.)

Town ordinances that require setbacks of septic systems from the riverbank and retention of shoreland vegetation are effective in preventing pollution from leachate and runoff. Existing vegetation management regulations vary widely among the four towns, from no requirements to maximum cut levels within a 150' zone. There is similar disparity among septic regulations. Only Durham requires the LRAC's recommended 150' septic setback. Other towns' setbacks are as follows: Lee, 100', Newmarket, 75', and Epping, 100'. No town provides for additional setbacks due to steep slopes.

Goals:

Work to identify and minimize present pollution problems.

Prevent future degradation of water quality from both point source and nonpoint source pollution.

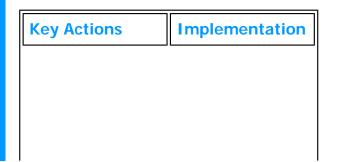
Issues:

Point Source Discharges Existing and potential new discharges need to be carefully managed to protect the Lamprey's water quality.

Nonpoint Pollution The Clean Water Act of 1972 focused on the clean-up of point source pollution. Its initial success revealed the importance of addressing the additional impacts of nonpoint source pollution on rivers and lakes. Today, pollution prevention must also focus on appropriate stormwater, septic system, and land management practices by public and private landowners. Maintaining buffer areas of natural vegetation along the river may be the most single important means of preventing nonpoint source pollution from reaching the river. Both enforcement of local and state regulations and the cooperation of informed landowners are needed to deal effectively with this issue.

Key Actions to Achieve the Goals

A. Point Source



Implement present state and federal programs and policies under the Clean Water Act to avoid water quality degradation from point source discharges, including water quality permitting, monitoring, and enforcement programs.

NH Department of Environmental Services, federal Environmental Protection Agency take the lead.

LRAC and LRWA help facilitate prompt responses to water quality complaints.

Code
enforcement
officers and
conservation
commissions
integrate local
knowledge of
discharge points
with State
discharge data to
ensure that point
sources are
appropriately
regulated.

Support the present State policy of requiring pollutant loading studies to determine whether the river can assimilate a new or increased discharge (as undertaken by the Town of Epping) because the Lamprey River is vulnerable to algae blooms and low dissolved oxygen levels and serves as a backup drinking water supply for

LRAC and the NH Rivers Program work with NHDES Water Supply and Pollution Control Division to continue the requirement for pollutant loading studies.

Durham and Newmarket.	
Minimize impacts of point-source discharges into the Lamprey through improved (advanced) treatment of municipal wastewater.	The LFF re used implication of the street of

he State, towns, RAC, and other elevant parties se the nportance of the amprey as a tate-protected ver (and otentially a derally rotected river) support inding requests r advanced eatment. (The ational Park Service has supported efforts on behalf of the Town of Epping to obtain funds for such improvements.)

B. Nonpoint Source

Key Actions Implementation Maintain Newmarket, Lee, vegetative buffers and Durham along the length enforce their of the river to existing filter out shoreland pollutants, to vegetative buffer help moderate ordinances. Epping is subject water to the State's temperatures, new shoreland and to otherwise support existing buffer river levels, requirement, but wildlife, and is encouraged to amend its aquatic organisms. shoreland ordinance to include vegetative buffers

rather than rely on the state law and state enforcement.

Code enforcement officers and conservation commissions continue to monitor compliance.

In its review of applications for development of the shoreline, the LRAC promotes enforcement of existing ordinances.

LRAC works with conservation commissions and the Lamprey River Watershed Association to inform riverfront landowners about the importance of vegetative buffers.

Maintain the
Lamprey River
floodplain and
associated
wetlands in an
undisturbed
condition.
Floodplains and
wetlands serve a
variety of
ecological
functions,
including water
quality protection.

The LRAC works with planning boards and conservation commissions to protect the integrity of the floodplain and wetlands along the river.

Key Actions

Standardize recommended septic setbacks of 150' from the river in all study area towns, and greater where receiving soils are limited for effluent assimilation or slopes are severe. These septic setbacks are recommended because the river is particularly vulnerable to pollution (relatively small, slow in flow) and supports pollution sensitive species (for example, trout, salmon, brookfloater mussels, and shad).

Implementation

The LRAC recommends that each town update its zoning ordinance to achieve the recommended setback.

Develop educational programs to increase public awareness of nonpoint source issues and initiate implementation of Best Management Practices (BMPs). LRAC encourages and cooperates with the LRWA, Cooperative Extension, Strafford and Rockingham Co. Conservation Districts, Soil Conservation Service, NHDES, Strafford and Rockingham regional planning commissions, and others to promote public education.

State develops

BMP implementation plan by 7/95; implementation by 1/99.

LRAC works with NHDES, watershed communities, and code enforcement officers to inform landowners, realtors, and development professionals about impacts of human activities on water quality.

Code enforcement officers and conservation commissions address septic system complaints.

Key Actions

Increase water quality monitoring to supplement the limited monitoring activities conducted by the State.

Implementation

The LRAC urges the State and EPA to continue both periodic and special physical/chemical/bacteria monitoring programs, and undertake biomonitoring (monitoring by examining aquatic invertebrates).

LRAC encourages local people (conservation commissions, citizen groups, school classes, etc.) to assist the State in providing an improved long-term monitoring program. The State or local high school labs assist local water quality monitoring efforts by processing samples.

Town health officers investigate suspected bacteria problems at swimming areas.

LRAC seeks state, federal, and local financial support for increased monitoring.

Prevent nonpoint source pollution from highway and bridge maintenance activities.

The LRAC encourages local highway departments to implement BMPs when storing road salt, controlling highway runoff, etc.

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IV. Management and Protection of Water Resources

B. Instream Flow

Background The water that ultimately makes its way into the Lamprey comes from precipitation. About half of the 20 inches/year of runoff available on average for instream flow through overland and groundwater flow occurs during March, April, and May. The watershed contains relatively few aquifers in direct contact with the river which might otherwise increase low summer and fall flows. Both low and high flows are exacerbated by activity in the watershed that reduces infiltration.

The most extreme low flow on record is 1 cfs, recorded at the Packer's Falls gauging station in October, 1935. The highest flow on record is 7,570 cfs, which occurred during the flood of April 1987. (Source: U.S. Geological Survey annual water year reports as summarized in the Lamprey River Resource Assessment.)

The Lamprey's spring floods have always been a well known characteristic of this river. It is a remarkable feature of the river that no flood control structures have ever been constructed to alter this natural cycle -- a fact largely responsible for the undeveloped nature of the river's often broad floodplain and undisturbed riparian ecology.

The Lamprey River serves as a backup drinking water supply for both the towns of Durham and Newmarket. The Town of Epping holds the only permit to discharge into the river in the four-town study area, from its wastewater treatment plant.

The NH Rivers Management and Protection Program reinforces state water quality criteria and sets standards for flows on its designated rivers or river segments, which include the Lamprey as it flows through Lee and Durham.

In August, 1994 the NH Department of Environmental Services released its draft Instream Flow Rules, which, when amended and adopted following public review, will guide the management of stream flows on the Lamprey in the designated segment. Flow standards are intended both to protect instream resources like water quality and fisheries and to allow for public benefits, including recreation and public water supplies.

The proposed NHDES rules have two basic components: a phased notification system to alert water users and the public as water approaches critical low flows; and a corresponding set of water conservation/use reduction measures which progress from voluntary to mandatory as flows decrease. The rules will apply to users of 20,000 gallons or more per day registered under RSA 482:3 III who withdraw from State-designated rivers. They contain special provisions for withdrawals for fire suppression and drinking water. At present the Durham/UNH withdrawal is the only registered water use on the State-designated portion of the Lamprey.

One desired outcome of the rules is that the public notification system and required reductions in consumption on the State-protected segment of the Lamprey will encourage water conservation by other water users throughout the watershed.

Goals:

Ensure river flows adequate to safeguard the ecological and recreational resources of the river, including the Great Bay estuarine system, while protecting the legitimate water needs of adjacent communities.

Promote water conservation to reduce demand for river water.

Promote long-range plans for the development of alternative water sources to reduce reliance on the Lamprey.

Protect natural flow patterns by preserving wetlands and floodplains and preventing alterations of flow by hydroelectric facilities and other water projects.

Issues:

Public Demand For Water During Low Flow Periods exacerbates the natural stress on the Lamprey at such times. The water withdrawal needs of communities and riverfront landowners predictably peak during summer low flow periods. The State's proposed instream flow rules attempt to address this issue; however, there is little documentation of the effects of low flows on the Lamprey. Whatever the determinations for instream requirements on the Lamprey, voluntary water conservation will play a key role in protecting flow. Currently there are no plans in place for systematically conserving water in Lamprey towns.

The Proposed Hydroelectric Development at Wiswall Dam would alter existing flows, likely undermining bank stability, flooding land, and jeopardizing anadromous fish restoration efforts of the NH Fish and Game Department. It also would threaten the water rights and supplemental drinking water supply of Durham. This project was licensed by the Federal Energy Regulatory Commission (FERC) in June, 1989. The license grants a private developer the right to take by condemnation the dam and water rights to the Lamprey, which are presently owned by the Town of Durham, and the right to flood land upstream of the dam to Hook Island in Lee. It was issued over objections of property owners, the Town of Durham, and the State, but has been temporarily stayed during the National Park Service's Wild and Scenic study. Wild and Scenic designation provides the only guaranteed means of stopping this project.

Key Actions to Achieve Goals

Key Actions

Implementation

Support adoption and implementation of instream flow rules under the NH Rivers Management and Protection Act to protect ecological, recreational, and water supply uses.

The NHDES has ongoing responsibility for developing and implementing the instream flow rules for the designated segment of the Lamprey. The LRAC will review the rules with the NHDES, town boards, relevant agencies, and user groups.

The proposed NHDES rules encourage the development of water conservation plans. The LRAC, with other citizens groups like the LRWA, will seek ways to promote water conservation, in cooperation with the Town of Durham, UNH, and other major water users.

Research instream flow requirements of fish and other aquatic life in order to better establish the protected instream flow.

The LRAC and NPS seek funds for aquatic/ ecological flow studies.

Maintain floodplains and wetlands in an undeveloped condition to absorb floodwaters and allow for flushing flows.

The LRAC works with the State, Corps of Engineers, and local communities to discourage development within floodplains.

Oppose construction of a hydroelectric facility at Wiswall dam.

It is the position of the LRAC that the construction and operation of a hydroelectric facility at the Wiswall dam is contrary to preservation of the river's resources and the Town of Durham's interests in public water supply.

Key Actions

Seek designation under the Wild and Scenic Rivers Act to permanently protect this segment of the river from new hydroelectric development. This action will also protect the riparian rights of the four towns, ecological resources of the river, and upstream properties from additional flooding.

Implementation

The LRAC recommends that the towns of Durham and Lee take the lead in petitioning the US Congress to enact Wild and Scenic designation. The LRAC will work with the four participating towns, the National Park Service, and the NH Congressional delegation in this regard.

Other Considerations and Opportunities:

Flow Augmentation There are a number of headwater reservoirs on the Lamprey and its tributaries which could offer opportunities for flow augmentation during low-flow periods on the river. The feasibility and desirability of such augmentation warrants more study.

Extend the State Rivers Management and Protection Program Only the segments of the river in Durham and Lee are included in the RMPP. A river system requires consistent policies throughout the watershed. Nowhere is this more evident than with water quality and flow. All towns on the Lamprey, in addition to the four towns included in this Plan, should work toward inclusion of the entire river in the NH Rivers Management and Protection Program.

Regional Population Pressures Population pressures in the southeastern portion of New Hampshire are collectively placing more and more stress on the region's river resources, particularly in the area of municipal withdrawals and waste water discharges. The LRAC believes that ultimately river capacities to serve both purposes will be exceeded, and long-range planning at the regional and state levels must address this issue.

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V. Effects on Water Resources Management from Designation under the National Wild and Scenic Rivers Act

This section outlines the responsibilities of the National Park Service (as the representative of the federal government under the Wild and Scenic Rivers Act) should the Lamprey River be designated into the Wild and Scenic Rivers System.

Water Quality:

Standards and Permits Present water quality standards for the Lamprey would be unaffected by designation of the Lamprey into the Wild and Scenic Rivers System, and there would be no additional permits required as a result of Wild and Scenic designation.

The NH Department of Environmental Services would continue to have primary responsibility, as delegated by the US Environmental Protection Agency, for achieving and maintaining water quality standards.

The State and federal EPA would continue to administer grants and permits under the Clean Water Act. The National Park Service would review such activities to ensure that such permits and grants reflect the intent of this Management Plan. The National Park Service would continue to seek ways for the Town of Epping to upgrade its treatment facility, including support of requests for financial assistance.

Enhancing Water Quality The National Park Service would seek the cooperation of federal agencies, especially the EPA, to alleviate water quality problems. Emphasis would be placed on bolstering implementation of nonpoint source pollution programs in the watershed, resolving known water quality problems, and sponsoring research related to water quality issues.

Instream Flow:

Responsibilities The State of New Hampshire would continue to have primary responsibility for establishing and maintaining protective instream flow conditions as articulated in the NH Rivers Management and Protection Act. The National Park Service has no authority to supercede or otherwise overrule the State's jurisdiction in this regard.

The Park Service would review and comment on all water resource development projects on or affecting the designated segment that require federal funds or federal permits to ensure their compatibility with the maintenance of flows adequate to support the outstanding resources of the Lamprey. Such review would include permits issued by the Army Corps of Engineers for dredge and fill permitted under Section 404 of the Clean Water Act.

Wiswall Dam The responsibility for operation of the Wiswall Dam to maintain flow conditions would remain with the Town of Durham. Since it is an existing facility, the National Park Service would have no review authority over the operation of the Town's water system or intake structure. Further, the National Park Service would recognize the municipal withdrawals from the Lamprey, together with the continued maintenance and operation of the dam and appurtenant facilities in their present capacities, size, and location, as compatible with designation into the Wild and Scenic Rivers System. It is the responsibility of the State and Town to make sure that the operation of the dam maintains adequate flows downstream of the dam.

As recommended in this Plan, the NPS in cooperation with State and private partners, would seek funding for a fish ladder at the dam as a river enhancement initiative associated with designation. Any such initiative would require the Town of Durham's cooperation, and the Town would be under no financial obligation. The National Park Service and its partners would assume responsibility for funding a fish ladder initiated as a result of designation.

Federal Water Resource Development Projects:

Any water resource development project funded, permitted, undertaken, or otherwise assisted by a federal agency would be subject to review by the National Park Service to ensure no direct and adverse effect on the designated segment of the Lamprey River or its outstanding natural and cultural values. The establishment of such a long-term water resources policy for all federal agencies is central to the purposes of the Wild and Scenic Rivers Act.

The NPS review of such projects would be conducted in consultation with affected communities, the State, and the Lamprey River Advisory Committee.

Hydroelectric Development:

On the Designated Segment Hydroelectric development projects on the designated river segment, including the pending project at the Wiswall Dam in Durham, would be prohibited under the terms of the federal Wild and Scenic Rivers Act. This prohibition would serve to protect the Town of Durham's water rights at the Wiswall Dam.

Above or Below the Designated Segment New hydroelectric projects above or below the segment would need to comply with the general provisions for federally assisted water resource development projects, namely, that they create no direct and adverse effect on the designated segment or its outstanding natural and cultural features.

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VI. Ecological Integrity

Background The Lamprey River is the longest of New Hampshire's coastal rivers, draining a 212 sq. mi. watershed dominated by undeveloped land, and the largest tributary to Great Bay, a National Estuarine Research Reserve. Within the towns of Epping, Lee, and Durham, most of the land in the river corridor is forested, with substantial areas of forested wetlands in the often broad floodplain. Occasional openings created by agricultural fields, beaver flowages, and scrub-shrub wetlands create further habitat diversity.

The rich bottomland soils support a variety of fruit and nut-bearing trees and shrubs which provide both food and shelter for wildlife. The undeveloped river corridor also creates a thoroughfare for wildlife movement and an important resting and feeding area during migration. Aquatic food sources, perch and nesting sites, extensive floodplain and wetland habitats, backwaters, seasonal pools, and variations in the substrate all contribute to make the Lamprey River area one of special ecological significance.

The presence of and potential for additional runs of river herring, American shad, and Atlantic salmon make this the state's most significant river for all species of anadromous fish. Sunfish, catfish, perch, largemouth and smallmouth bass, and pickerel are common warmwater resident species, and coldwater residents include brown and brook trout.

During the Wild & Scenic Study, several special natural resource inventories were conducted with National Park Service financial support and are summarized in the Resource Assessment. A mussel study documented six of the nine riverine mussels known to occur in New Hampshire, including one state-listed Endangered Species. These findings indicate a healthy riverine system, and rank the Lamprey as a resource of statewide significance for freshwater mussels.

A bird study documented 159 species of birds in and along the river, including all species that are typically associated with riparian habitats and regularly breed in New Hampshire. Spring and fall migrants use the river extensively for feeding and resting. Many songbirds nest in the corridor, attracted by the river's lush vegetation and abundant insects. Numerous waterfowl and water dependent species are also supported by the river.

All six of the turtles species native to New Hampshire are found along the Lamprey, including the rare Blanding's, Spotted, and Wood turtles. Each of the six species requires specific habitats ranging from deep water channels to backwater swamps to extensive undeveloped upland habitat for travel, breeding, and resting. The Lamprey is a stronghold in southeastern New Hampshire for these sensitive residents.

Botanists documented 172 wetland and aquatic plant species in and along the river and several excellent examples of floodplain, riverine, and wetland communities.

All four municipalities have local regulations that provide some protection of the Lamprey River shoreland, wetlands, and floodplain. Many landowners have helped protect critical wildlife habitat by minimizing or eliminating riverfront cuttings.

Goals:

Protect the Lamprey's wildlife and aquatic habitats and plant communities from degradation.

Protect "pristine" areas, important habitats and plant communities, and the diversity of habitats.

Safeguard flow levels and water quality to protect life in and along the river.

Promote the restoration of shad and river herring runs to upper reaches of the river system. Promote the preservation of resident fish species such as bass and pickerel.

Issues:

Whether or not the Lamprey continues to enjoy special significance for fish and wildlife depends largely on the impacts of human activity, which often harms the environment without the individual actors realizing it. Management decisions affecting the river and adjacent land need to incorporate habitat considerations if the river's existing high quality habitat and species diversity is to be maintained.

Recreational Use may threaten plant communities and wildlife in certain areas of the river and during certain times of year.

Encroaching Development and land clearing along the river corridor can degrade habitats by: fragmentation and destruction by road construction and other development; water pollution, including impacts from erosion and chemical applications; introduction of new levels of human activity; introduction of invasive plants, such as purple loosestrife, phragmites, and autumn olive; and other such activities.

Loss of Shoreland Vegetation may jeopardize important river attributes, including critical habitat, food, shade for the river, a filtering mechanism for pollutants in runoff, travel ways for wildlife, and bank stabilization. This includes the disruption or destruction of important floodplain plant communities.

Key Actions to Achieve the Goals

Key Actions	Implementation

Protect sensitive ecological areas from human activity as part of the "TREAD LIGHTLY" program.

The sensitivity to human disturbance of wildlife species and natural plant communities along the river warrants investigated, and recreational use is sited to avoid adverse impacts on sensitive habitats and species.

LRAC works with town boards, govt. agencies, and others to ensure that public policies regarding the Lamprey incorporate ecological concerns.

The LRAC and LRWA work with landowners who allow public access and with user groups to ensure that adverse impacts on plant communities and habitats are avoided, e.g, motorboat wake, disturbance to nesting areas.

Key Actions

Implementation

Educate citizens about the impacts of their actions on the river system as part of the "TREAD LIGHTLY" program.

Education on:

- Vegetative buffers along the river natural plantings
- Wildlife and habitat requirements
- Importance of floodplain and riparian plant communities
- Nonpoint source pollution prevention, including septic system operation and maintenance
- Vernal pools
- Avoidance of introduction of invasive plants
- Information on needs of species particularly vulnerable to human disturbance
- River dynamics

Appropriate agencies to provide such information include the LRWA, LRAC, conservation commissions, NHDES, Coop. Ext., NH Fish & Game, schools, etc.

Establish a long-term plant and animal research and monitoring program to supplement field studies conducted during 1993-94.

LRAC works with NH Natural Heritage Inventory, NH Nongame Program, UNH, other organizations, and landowners to develop a mechanism to meet ongoing research needs.

Key Actions	Implementation
Promote local ordinances that preserve and protect the river's ecology.	LRAC encourages communities to adopt or amend ordinances that protect habitat, such as shorelines, wetlands, etc., and disseminates model ordinances from other communities as examples.
Provide for vegetative buffers that both protect the ecosystem and water quality and are enforceable.	Newmarket, Lee, and Durham should develop viable means of enforcing their existing shoreline vegetation buffer ordinances. Epping is covered by the state shoreland protection act, but should adopt a more effective local ordinance tailored to the Lamprey River.
Protect wetlands and floodplain, including adjacent upland buffers, from nonessential dredging, filling, and other permanent alteration.	LRAC encourages communities to amend, as necessary, and enforce relevant ordinances. The LRAC fulfills its responsibilities under the state RMPP to review and comment on all applications that have an impact on the river system. Conservation commissions in the four towns are encouraged to do the same.
Maintain protected seasonal flows.	NHDES, through the RMPP instream flow rules.
Ensure that riverfront development that occurs does so in a manner which protects the river and adjacent sensitive areas and minimizes habitat fragmentation.	The LRAC encourages communities to adopt ordinances protecting important plant communities and habitat, including consideration of density bonuses and other incentives. The LRAC includes habitat in its review of proposed projects under the State RMPP.
Key Actions	Implementation

Encourage permanent protection of important habitats and travel corridors. Large, contiguous, undisturbed areas are essential for certain wildlife species.	The LRAC works with/encourages conservation organizations such as the LRWA, Society for the Protection of NH Forests, Strafford Rivers Conservancy, Rockingham Land Trust, and conservation commissions to work with landowners to protect important habitats on a voluntary basis by sale or gift of a conservation easement or fee simple acquisition. (See Appendix F.) LRAC works with landowners of important properties to encourage land management practices compatible with resource protection.
Provide for fish passage at Wiswall Dam.	NPS, NH Fish & Game Dept, and others seek funding for fish passage subject to approval by the Town of Durham. (See discussion under Instream Flow.)
Promote retention of State current use program.	The LRAC and LRWA, in cooperation with other concerned organizations, notify towns and landowners when legislative actions threaten the State program.
Encourage preservation of agricultural open space adjacent to the river.	Support funding to purchase conservation easements on agricultural lands, e.g., funding initiatives of the NPS. Promote sustainable agriculture to help protect healthy habitat diversity.
	Promote an understanding of the costs of development to communities.

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VII. Historical and Archaeological Resources

Background Our knowledge of human history along the Lamprey River begins more than 8,000 years ago. At this time people occupied what appear to have been seasonal sites on the river, from which they hunted, fished, and ventured forth along the river as their highway. Artifacts suggest exchange with early peoples in Massachusetts and a common cultural tradition with people occupying known sites in Manchester, NH.

The earliest European settlers were drawn to the river as an energy source. There have been mills at the "lower falls" in Newmarket (Macallen Dam) since at least 1652, when Valentine Hill built a dam at this favored site. Mills later were built at virtually all the other falls on the river. Grist, flour, and sawmills were typical as people first settled the area. More elaborate manufacturing operations followed, including the production of woolens at three mills in Epping (Blake Road, Folsom mill, and Epping Village), cloth, agricultural tools made of iron, nuts and bolts, wooden manufactured goods, paper, and wallpaper at Wiswall and Packers falls in Durham, plaster and shoes at the Folsom mill, and leatherboard at Wadleigh Falls in Lee during the early 1900s.

Two sites on the river are listed on the National Register of Historic Places: the Wiswall Dam area and a commercial district in downtown Newmarket containing 41 buildings. Both reflect the river's important contribution to nineteenth and early twentieth century industry. Historic districts in Newmarket and Epping include portions of the riverfront in those communities. Highland House, near Packers Falls in Durham, was a destination hotel for recreationists from Massachusetts, New York, New Jersey, and California that reached its peak in the 1930s. Hedding Camp in Epping, today a small summer resort village of more than 100 buildings, was acquired in 1862 to house the Methodist Camp Meeting. Many residences in the corridor speak to these earlier times.

Goals:

- Continue professional research on the Lamprey's history and archaeology.
- Protect important historical and archaeological sites on the river.
- Educate people about how others have related to the river from the Stone Age to the present.

Issues:

Gaps in Our Historical Knowledge of the river exist, and there is no written history solely about the river. Additional research on historical structures (including significant bridges), events, and lifestyles, archaeological field work and evaluation, and a publication on the Lamprey's history would improve our knowledge, fill existing gaps, and enhance protection efforts.

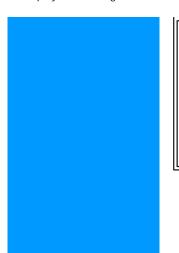
Protection for Significant Sites is presently piecemeal and often inadequate. Private landowners, municipalities, and developers may be inadvertantly destroying sites and artifacts because they do not realize what is there. While public access to historical and archaeological sites is sometimes desirable, access can lead to destruction. Publicity, where appropriate, must include provisions to avoid overuse and abuse, as from people dislodging foundation rocks or removing "souvenirs" from a site.

The Lamprey's Rich Human History Is Unknown to school children, recreationists, and residents, but offers potential educational opportunities focusing on the diversity of activities and historical details of life on the river at different times (e.g., how water wheels work).

Key Actions to Achieve the Goals

Key Actions	Implementation
Identify priority sites for research.	The LRAC has identified two new issues for research: locating the Lamprey Iron Works and the route of the oxway road from the Macallen Dam in Newmarket to Wadleigh Falls in Lee. Additional research on known archaeological sites at Wiswall and Wadleigh falls is also needed.
	The LRAC identifies and evaluates additional sites, including those above Wadleigh Falls.
	Any publicly owned land with high historical or archaeological potential slated for development or private land with high historic or archaeological potential undergoing subdivision should be evaluated for the possibility of yielding archaeological information.
Conduct field investigations and related research.	The LRAC works with the National Park Service, NH Division of Historical Resources, the University of NH, and other interested parties to secure funding and personnel for additional research.
Key Actions	Implementation

Identify and implement appropriate protection measures on a site-specific basis, ranging from acquisition to protection from human traffic.	Different approaches should be considered for protecting key sites, including full title purchase, conservation easements, a voluntary registry/ landowner contact program, and creation of historic districts. Specific locations may remain undisclosed at sensitive sites or the landowner's directive The LRAC uses its permit review responsibilities to encourage protection of known or suspected sites. The LRAC, in cooperation with the LRWA, UNH, or other entities, works with landowners to promote follow-up investigation of artifacts and historical remains discovered by property owners and in other ways promotes stewardship of historical features.
Determine the historical significance of public areas prior to activities that might disturb historical or archaeological features.	As part of its review process the LRAC works with town agencies to make sure that an area is researched for archaeological artifacts under professional supervision before any earth moving activity occurs on public lands along the Lamprey River.
Key Actions	Implementation
Develop materials and programs that communicate the river's historical and archaeological significance.	The LRAC writes a grant request to support preparation of an interpretive guide to the river's history, a list of historical markers, and other creative ways to bring history to life (dioramas, slide shows, etc.). Schools are encouraged to use the Lamprey as a way to expose students
	to NH history.
Interpret individual sites.	The LRAC works with town agencies, highway departments, and town historical societies to install informational signs on public lands and roads. The LRAC should explore the possibility of informational signs on private lands with the landowners.



Provide for permanent protection of irreplaceable historical documents pertaining to the river.

The LRAC endorses retention of historical information in the local communities, with provisions for particularly valuable historical materials to be copied for local use and then archived at the State Library or other appropriate repository.

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VIII. Public Enjoyment

Background The Lamprey River supports a wide variety of recreational uses that contribute to public enjoyment including walking, picnicking, nature watching, fishing, swimming, boating, tubing, winter sports, hunting, and trapping. In addition, there are a few commercial enterprises (campgrounds and a rowing center) dedicated to recreational enjoyment of the river. Respondents to the LRAC's landowners' survey indicated that they use the river regularly and are deeply interested in preserving its beauty and serenity. They also support the "status quo" with respect to most recreational uses of the river. Just under half of the landowners responding support additional canoeing, walking, fishing, and swimming. More than half would like to see reductions in off-road vehicles, motor boats, snowmobiles, and hunting. The chart in Appendix H shows where public lands and access points along the river currently exist.

To a large extent, the duration, intensity, and location of these uses are self-regulating due to seasonal low flows and limited public access. The LRAC believes that in most instances these constraints serve a beneficial purpose by limiting public use during periods of high ecological stress (during low water) and by limiting the amount of river which receives heavy use. Any substantial increase in public use would require more active management.

While the Lamprey River is a significant recreational resource to the four towns involved in the study, use of existing and future recreational sites can and should be compatible with, and sensitive to, the natural and cultural resources in the river corridor. Recreational use also should reflect an environmental awareness, whereby personal interaction with the river environment minimizes impacts and leaves little trace of human activity. Through creative management, public education, and natural constraints on use, the river's attributes can be preserved for public enjoyment.

Goals:

- Promote public enjoyment based on a "TREAD LIGHTLY" recreational use policy.
- Promote recreational uses which safeguard the natural river environment.
- Promote better planning for recreational use of the Lamprey.
- Protect recreational sites from abuse and overuse.

Issues:

Concentrated Use of Some Recreational Areas A number of public and private access points in the four-town study area are subject to consistent overuse because of their unique riverine or topographical characteristics, proximity to roadways, or easy access across private lands. These areas are not managed for the types and intensity of recreational use that they receive. This situation leads to litter, vandalism, and other site degradation, as well as conflicts between recreationists and private

landowners, and safety problems.

Increased recreational use will heighten the need for planning and management.

Principal Cooperators:

- Town governments
- Riparian landowners
- NH Fish & Game Department
- Recreational user groups

Key Actions to Achieve the Goals

Key Actions	Implementation
Actively promote a "TREAD LIGHTLY" theme for the river corridor.	The LRAC develops "TREAD LIGHTLY" policies, such as staying on trails, carrying out litter, and leaving natural objects and artifacts in place (see Appendix E), which should be promoted and visibly displayed at all public accesses and recreation sites.
Develop a river recreation education program.	The LRAC develops an educational program to promote an increased appreciation of the river environment and advance the "TREAD LIGHTLY" theme, with assistance from the NPS and other appropriate sources. These educational materials will be developed for both adults and school-aged children.
Upgrade public access and recreational sites as appropriate.	The LRAC works with the towns, the NH Department of Transportation, NH Fish and Game, and other organizations to upgrade sites as appropriate (e.g., canoe launch, portage) and provide informational signs (e.g., highlighting historical and natural features or promoting the "TREAD LIGHTLY" theme).

Key Actions	Implementation
Develop a multi-town recreation management plan for the river.	The LRAC encourages town recreation commissions to view the Lamprey as a community resource, to include river activities in their programs, and to work with the LRAC to develop a multi-town recreation management plan for the river. Such a plan should promote public
	enjoyment of the river, emphasize public education, and distribute recreational activities in a way that preserves environmentally and culturally sensitive features.
Provide for passive use enjoyment at points of visual significance.	The LRAC encourages communities to develop scenic vistas from locations along the river for passive enjoyment (off-road temporary parking, educational signs, etc.). These sites might also be made accessible to the handicapped.
Offer assistance to landowners who allow public access.	LRAC and LRWA work with landowners on a site-specific basis to assist with clean up, maintenance, signs, etc.
Research development of additional recreation sites for swimming to ease the demand at other locations, e.g., Wiswall Dam.	The LRAC will work with the four communities to identify additional swimming sites that are accessible, publicly owned, and safe.
Key Actions	Implementation
Promote management policies that better distribute recreational use and minimize recreational impacts.	The LRAC works with NH Fish & Game, snowmobile clubs, town recreation committees, and NH Dept. of Safety to promote "TREAD LIGHTLY" policies.
	Explore variations in fish stocking practices to distribute fishing opportunities more widely along the Lamprey and minimize competition with resident warmwater species.



Seek increased enforcement of existing state speed laws (headway only) for motorboats on the Lamprey.

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IX. Effects on Ecological, Historic, and Recreational Resources Management from Designation under the Wild and Scenic Rivers Act

This section outlines the support available from the National Park Service (as the representative of the federal government under the Wild and Scenic Rivers Act) if designation of the Lamprey River into the Wild and Scenic Rivers System occurs.

General:

The National Park Service would seek to utilize the national designation to ensure that federal agency actions related to the river were consistent with the goals and objectives of this Plan.

The technical planning resources and financial assistance of the National Park Service would be available for conservation and enhancement projects related to the natural, cultural, and recreational resources highlighted in this Plan, subject to Congessional appropriations and other budgetary constraints. The National Park Service would consider requests for such assistance in coordination with the Lamprey River Advisory Committee.

Ecological Integrity:

The objective of the LRAC is to protect and enhance the ecological integrity of the Lamprey River by promoting research, education, and voluntary land protection to complement enforcement of existing regulations. The National Park Service supports this approach, and would cooperate with all relevant parties in its promotion.

The NPS would support the LRAC's voluntary land protection program as an integral aspect of conserving the Lamprey's special ecological values.

The NPS, in conjunction with the LRAC, the NH Natural Heritage Inventory, and The Nature Conservancy, would explore avenues for continuing ecological research and monitoring conducted through the Wild and Scenic River study.

Historical and Archaeological Resources:

The National Park Service would support the efforts of the LRAC to research, protect, and interpret the historical and archaeological aspects of the Lamprey River. The NPS has substantial expertise and experience in such areas, and would consider requests for technical and other assistance.

Public Enjoyment:

The National Park Service supports the LRAC's goals for recreational use and

development as articulated in this Plan. The NPS would not promote recreational use of the Lamprey which exceeds the scope of this Plan, and would work to ensure that uses are compatible with and sensitive to the river's outstanding natural and cultural resources and to the river's inherent limitations for recreational use.

All recreational uses of the river area, including hunting, fishing, trapping, snowmobiling, boating, and other such uses would be unaffected by national designation, and would continue to be managed according to existing state and local authorities.

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X. State and National River Programs

A. New Hampshire Rivers Management and Protection Program (RMPP)

Background The State Rivers Management and Protection Program (RMPP) was enacted in 1988 to protect the State's most significant rivers or river segments. That part of the Lamprey River which flows through Lee and Durham was among the first rivers nominated into the RMPP, in 1990, by a local citizen initiative. The RMPP establishes that a local advisory committee be created on each designated river to implement river management and protection policies at the local level.

LRAC Responsibilities The LRAC serves as the local advisory committee on the Lamprey. The LRAC's responsibilities are to: advise the DES and municipalities on matters pertaining to the river; develop and assist in the implementation of a river management plan (this Plan); review and comment on any development projects or state, federal, or local permits affecting the river; report annually to the State Rivers Management Advisory Committee and the Commissioner of the Department of Environmental Services.

State Responsibilities The State, for its part, assumes responsibility for assisting the local advisory committee and provides the following protections for the Lamprey:

State policies against the construction of new dams or the transfer of water from the Lamprey out of the seacoast watershed;

A State policy to protect water quality and maintain adequate year-round flows in the river which support a full range of natural resource needs and human uses. (Draft rules to implement this directive have been released by the NHDES for review and comment; see Background discussion under Instream Flow);

Mandatory setbacks for new solid and hazardous waste facilities.

The State program does not regulate land use (other than the restrictions on dams and waste facilities), and local zoning authorities are unaffected. The locally developed Management Plan may make recommendations for zoning or other local regulatory changes, but these can only be implemented through standard local procedures. The RMPP does not authorize any State funding for the local committee or for protection and management of the river. The State program may influence federal agencies but does not give the State veto power over them.

B. Designation under the National Wild and Scenic Rivers Act

<u>Purposes</u> The broad purposes of national designation on the Lamprey are to

- 1) establish federal policies for the watercourse which ensure that federal actions are consistent with the river protection goals of this Plan and
- 2) provide for financial and technical assistance of the National Park Service in implementing this Lamprey River Management Plan.

Administrative Structure The existing structure established through State designation of the Lamprey River under the RMPP satisfies the requirements of the national program for administering the designated river segment. The National Park Service would coordinate its responsibility to ensure federal agency consistency with the Lamprey River Advisory Committee. The LRAC would be the focal point for communication and coordination among local communities, the State, and the National Park Service, effectively continuing the cooperative approach established over the past several years.

<u>Designation Process</u> The Congressional designation process requires enactment of a designation bill specific to each new river segment. This bill is an amendment to the broader Wild and Scenic Rivers Act and contains provisions tailored to the river segment in question. For the Lamprey, the bill would identify this Plan as <u>the</u> management plan for the river and would establish the LRAC as the official advisory body to the NPS.

In the event that local communities express a desire to move forward with a national designation based on the principles laid out in this Management Plan, the National Park Service will work with the LRAC, community officials, and the NH Congressional delegation to draft an amendment to the Wild and Scenic Rivers Act designating the Lamprey. No designation will proceed without the express approval of town officials for the provisions of the designation bill and Management Plan.

National Park Service Role The National Park Service would have two distinct roles under the federal designation: 1) to review "federally assisted water resources projects on or directly affecting" the designated river segment to ensure their compatibility with this Management Plan and 2) to provide technical planning and financial assistance for implementation of the Plan and its recommendations.

National Park Service authority for the review of federally assisted water resource projects derives from Section 7 of the Wild and Scenic Rivers Act, which states:

no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary [of the Interior] charged with its administration.

Section 7 is the only Section which confers "regulatory" oversight to the National Park Service, which serves as the representative of the Secretary of the Interior under this Act.

Limitations of National Designation:

Land Use Management The Wild and Scenic Rivers Act confers no authority to the National Park Service to manage, regulate, zone, or otherwise restrict the use of nonfederal lands. Management and use of lands adjacent to the river would continue to be the responsibility of landowners subject to existing state and local regulations.

Land Acquisition The National Park Service would not own or manage any lands along the river and would not support condemnation of land along the river. Federal funds could be made available to land trusts and local communities through designation for the purchase of lands or conservation easements that advance the purposes for which the river was designated (particularly ecological, archaeological, fisheries protection). The NPS would consider providing funds subject to the following conditions:

- the acquisition be from willing sellers only;
- local municipal authorities approve the acquisition; and
- an appropriate local, state, or nonprofit entity and not the National Park Service holds title and management responsibility for any purchased lands or easements.

Permits No new state or federal permits would be required as a result of national designation. Local permitting processes would be unaffected.

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Definitions

Anadromous fish - Fish that live part of their lives in the ocean and part in freshwater.

Conservation easement - Provisions attached to a property deed which permanently limit the types of uses and/or development on the land.

Density bonus - An increase in the amount of development allowed by a town on a parcel of land in exchange for a developer's modifying the development plans to include public benefits.

Nonpoint source pollution - Pollution from runoff.

Point source pollution - Pollution from a pipe.

Riparian - Relating to shorelands.

Vernal pool - Temporary, seasonal pool of water critical to the survival of certain species.

Watershed - The geographic area that drains into a river, either directly or via tributaries.

Programs and Abbreviations

BMP (w/ e.g.s) - Best Management Practices for controlling pollution from runoff, e.g., swales planted with grass to filter out pollutants, regular pumping out of septic systems, and fertilization timed to coincide with maximum plant uptake of nutrients.

EPA - US Environmental Protection Agency.

FERC - Federal Energy Regulatory Commission.

GIS - Geographic Information System, a computer-support system for mapping and mapping-related data.

LRAC - Lamprey River Advisory Committee (created under the NH Rivers Management and Protection Program).

LRWA - Lamprey River Watershed Association (private, nonprofit membership organization).

NHDES - NH Department of Environmental Services.

NPS - National Park Service.

Plan, the Plan - This Lamprey River Management Plan.

RMPP - NH Rivers Management and Protection Program.

Wild and Scenic Rivers System - National system of outstanding rivers into which individual rivers are designated by US Congressional action.